

REMARKS

Applicants have carefully reviewed and considered the Office Action mailed on November 6, 2002, and the references cited and applied therewith.

No claims are amended, canceled, or added. As a result, claims 4-27 remain pending in this application.

Proposed New Figures 7 and 8

The drawings were objected to under 37 CFR 1.83(a). The Examiner stated that the features of claims 4, 18-22, and 24-25 must be shown or the features canceled from the claims.

Accordingly, Applicants are submitting herewith proposed new Figures 7 and 8, to satisfy the requirements of 37 CFR 1.83(a). Figure 7 is submitted to support the claim limitations pertaining to a mobile computing device, such as a personal digital assistant (PDA). Figure 9 is submitted to support the claim limitations pertaining to a personal computer (PC).

No new matter has been added. Support for the proposed new Figures 7 and 8 may be found in the application as originally filed.

For the Examiner's convenience, Table I below lists the elements shown in the block diagram of Figure 7, and the corresponding support in the original application.

TABLE I

| <u>Element</u> | <u>Support</u> |
|--------------------------------|---------------------------------------|
| Touch screen 102 | Figure 1 |
| Keypad 104 | Figure 1 |
| MIC 106 | Figure 1 |
| Processor 140 | Page 6, line 23 |
| Memory 142 | Page 3, line 27; page 6, line 20 |
| Voice translation software 144 | Page 6, lines 23-24 |
| Tx / Rx 150 | Page 5, lines 22-26; claim 8, line 13 |

| | |
|--------------------|--|
| Link 152 | Page 3, lines 22-25; page 4, lines 18-20 |
| Link 154 | Page 5, lines 12-13 |
| Audio playback 160 | Page 6, lines 6-8 |
| Speaker 170 | Page 6, lines 6-8 |
| Power 180 | Page 4, line 21 |

Table II below lists the elements shown in the block diagram of Figure 8, and the corresponding support in the original application. In the case of a display 202, keyboard 204, memory 206, and processor 210, these elements are asserted to be inherent in any personal computer.

TABLE II

| <u>Element</u> | <u>Support</u> |
|--------------------------------|---|
| Display 202 | Inherent in any PC |
| Keyboard 204 | Inherent in any PC |
| Memory 206 | Inherent in any PC |
| Voice translation software 208 | Page 5, lines 8-10; claim 8, lines 9-10 |
| Processor 210 | Inherent in any PC |
| Tx / Rx 212 | Page 5, lines 7-13 |
| Link 214 | Page 5, lines 7-8 |
| Link 216 | Page 5, lines 10-17 |

Regarding the Examiner's specific objection to claim 4, proposed new Figure 7 shows a "PDA having a wireless transmitter to transmit electronic voice signals to a personal computer (PC), and a wireless receiver to receive translated voice information" in the form of Tx/Rx 150.

Regarding claims 18-21, support is asserted to already exist in original Figures 2 and 3 for "a microphone located at the second end of the stylus", because Figures 2-3 show microphone 120 (described, for example, on page 4, lines 5-7).

Regarding claim 22, proposed new Figure 7 shows a memory 142 to “store electronic voice signals on the PDA”.

Regarding claims 24-25, proposed new Figure 7 shows “a microphone built into the PDA” in the form of microphone 106. Support is also asserted to already exist in original Figure 1.

REMARKS

Applicants have carefully reviewed and considered the Office Action mailed on November 6, 2002, and the references cited therewith.

No claims are amended, canceled, or added. As a result, claims 4-27 remain pending in this application.

Rejection of Claims 4-6, 8-15, 18-21, and 23-27 Under 35 U.S.C. §103(a) over Foladare and Ohashi

Claims 4-6, 8-15, 18-21, and 23-27 were rejected under 35 U.S.C. §103(a) as being unpatentable over Foladare et al. (U.S. Patent No. 5,894,595) in view of Ohashi (U.S. Patent No. 5,581,783).

Foladare discloses a personal mobile communication system (100, FIG. 1) in which a caller may initiate a call to an individual having a PDA 103. The call to the PDA may contain voice, facsimile, data, or a combination thereof (col. 1, lines 58-61). Information signals from a caller are routed to the PDA. The called individual is only alerted to the presence of information once it has been successfully transmitted to the PDA, or the called individual is alerted to the presence of a successful voice connection (col. 1, line 49 through col. 2, line 58). The PDA can make an outgoing call to connect the PDA to the calling party, either directly or through a store and forward unit. As understood, Foladare does not appear to disclose using PDA 103 to transmit electronic voice signals to the PC 104 (FIG. 1). The operation of the PDA in Foladare appears to be limited to receiving FAX and data information in a one-way direction from FAX machine 102 and PC 104, respectively, or for conducting two-way voice communications with telephone 101.

Regarding independent claim 4, Applicants respectfully assert that Foladare fails to disclose, for example, a mobile PDA having a wireless transmitter to transmit electronic voice signals to a PC. In Foladare, the PDA does not appear to transmit any type of signal to the PC.

Further regarding independent claim 4, Foladare fails to disclose a wireless receiver to receive translated voice information from the PC. In the context of various embodiments of Applicants' invention, the terms "translated voice data" and "translated voice information" are intended to refer to alpha-numeric text that has been converted from acoustic speech. Examples of such text are given in the paragraph beginning on page 3, line 29.

In Foladare, there appears to be no disclosure of voice translation software anywhere within the system 100. Further, there appears to be no motivation to provide voice translation software within Foladare's system, e.g. within PC 104, as suggested by the Examiner. Although the called individual can conduct two-way voice communications with the caller's telephone 101, there appears to be no disclosure within Foladare that the called individual can transmit any voice signal to the PC 104. Thus, no motivation exists for providing voice translation software for PC 104.

The Examiner's statement that "it would have been obvious for one skilled in the art to have recognized that Foladare's PC (104) has to have a voice translation software to translate voice signals received from the PDA (103)" is respectfully asserted to be based upon hindsight learned from Applicants' own disclosure.

Foladare only discloses a dumb stylus (FIG. 1) having no internal intelligence or communication ability. The Examiner has suggested that it would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to have been motivated to use the stylus of Ohashi with the PDA of Foladare "because this will provide easy to carry with a greater mobility" [sic]. Again, this statement is respectfully asserted to be based upon hindsight learned from Applicants' own disclosure.

Ohashi discloses a multimedia information capturing system comprising a stylus (1, FIG. 6a) having a microphone 71, a wireless transmitter 18, and a wireless receiver 75. The system additionally includes an associated "data processing unit" (3, FIG. 6b) that has a wireless transmitter 83, a wireless receiver 32, a voice-reproducing unit 83, and a speaker 84. Voice

information captured with the stylus can be reproduced in the data processing unit's speaker 84. The "data processing unit" is described as a "personal computer" (col. 2, line 47), not as a "PDA". Thus, Ohashi lacks any teaching of transmitting voice information between a stylus and a PDA.

The Examiner stated that "Ohashi discloses a computer processor transmitter for transmitting translated voice data (see col. 2, lines 39 - col. 3, lines 21)". However, in Ohashi the term "voice data" is used to describe recorded acoustic voice signals, as opposed to "translated voice data" or "translated voice information" as recited in Applicants' claims.

The combination of Foladare and Ohashi fail to teach or suggest all of the claim limitations present in independent claims 4, 8, 12, 16, and 23, so a *prima facie* case of obviousness has not been established.

For example, further regarding independent claim 4, the suggested combination fails to disclose or even suggest, among other things, a PDA having a wireless transmitter to transmit electronic voice signals to a personal computer, or a wireless receiver to receive translated voice information from the PC, or a touch screen display to visually display the translated voice information.

Regarding independent claim 8, the suggested combination fails to disclose or even suggest, among other things, a PC having a processor, speech recognition software to instruct the processor to translate electronic voice signals into translated voice data, a wireless receiver to receive the electronic voice signals, or a wireless transmitter to transmit the translated voice data.

Regarding independent claim 12, the suggested combination fails to disclose or even suggest, among other things, transmitting electronic voice signals from a hand-held stylus to a PDA, or translating the electronic voice signals into translated voice data and storing the translated voice data in the PDA.

Regarding independent claim 16, the suggested combination fails to disclose or even suggest, among other things, a PC performing voice recognition processing on electronic voice signals transmitted to it from a stylus and producing translated text, or the PC wirelessly transmitting the translated text to a PDA, or the PDA visually displaying at least part of the translated text.

Regarding independent claim 23, the suggested combination fails to disclose or even suggest, among other things, a PDA wirelessly transmitting electronic voice signals to a PC, or the PC receiving the electronic voice signals and performing voice recognition processing on them to produce translated text, or the PC wirelessly transmitting the translated text to the PDA, or the PDA wirelessly receiving the translated text and visually displaying at least part of the translated text.

For the above reasons, independent claims 4, 8, 12, 16, and 23 should be found to be allowable over any combination of Foladare and Ohashi, and Applicants respectfully request that the rejection of claims 4, 8, 12, 16, and 23 under 35 U.S.C. § 103(a) as being unpatentable over Foladare in view of Ohashi should be withdrawn.

Dependent claims 5-6, 9-11, 13-15, 18-21, and 24-27, which are based, directly or indirectly, upon independent claims 4, 8, 12, 16, and 23 respectively, and incorporate all of the limitations of their respective base claims, should also be allowable for the reasons presented above.

Rejection of Claim 7 Under 35 U.S.C. § 103(a)
over Foladare, Ohashi, and Epperson

Claim 7 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Foladare in view of Ohashi as applied to claims 1 [sic], 3-6 and 8-15 above, and further in view of Epperson (U.S. Patent No. 5,247,137). (Claim 1 was previously canceled in the Response dated July 10, 2001.)

Foladare and Ohashi were discussed previously.

Epperson discloses a stylus (FIG. 1) having batteries 5,6. However, Epperson fails to disclose a stylus having a microphone or any provision for speech capture.

The combination of Foladare, Ohashi, and Epperson fails to teach or suggest all of the claim limitations present in dependent claim 7, so a *prima facie* case of obviousness has not been established. Although Epperson discloses a "power supply located within the housing", not all of the claim limitations appearing in base claim 4 are taught or suggested by any combination of Foladare and Ohashi, as was mentioned earlier.

For the above reasons, dependent claim 7 should be found to be allowable over any combination of Foladare, Ohashi, and Epperson, and Applicants respectfully request that the rejection of claim 7 under 35 U.S.C. § 103(a) as being unpatentable over Foladare in view of Ohashi and further in view of Epperson should be withdrawn.

Rejection of Claims 16 and 22 Under 35 U.S.C. § 103(a)
over Ballantyne, Ditzik, and Foladare

Claims 16 and 22 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Ballantyne et al. (U.S. Patent No. 5,867,821) in view of Ditzik (U.S. Patent No. 5,983,073) and Foladare.

Ballantyne discloses a PDA (10, FIG. 1) in wireless communication with a personal care station (PCS). A secure signature pen (104, FIG. 6) is used to authenticate a user of the PDA and accordingly grant access by the user to an associated computer network (col. 14, lines 51-61) when the pen is touched to the PDA. However, the pen 104 does not appear to transmit electronic voice signals to a PC, such as a PCS (FIG. 1).

Ditzik discloses a hand-held computer (FIG. 2) or base unit (100, FIGS. 3a and 3b) having a pen input means 7. The base unit can relay information wirelessly between an associated handset or earset and an external wide area communications network, and such information can include text, voice, graphics, video, and/or images (col. 13, lines 25-30). The pen or stylus 7 (FIG. 2, col. 5, lines 18-23) appears to be a dumb stylus having no internal intelligence or communication ability.

Foladare was discussed previously. As mentioned earlier, the stylus of Foladare (FIG. 1) appears to be a dumb stylus having no internal intelligence or communication ability.

The combination of Ballantyne, Ditzik, and Foladare fail to teach or suggest all of the claim limitations present in independent claim 16, so a *prima facie* case of obviousness has not been established. Among other things, none of the references discloses a stylus wirelessly transmitting electronic voice signals to a personal computer.

For the above reason, independent claim 16 should be found to be allowable over any combination of Ballantyne, Ditzik, and Foladare, and Applicants respectfully request that the

rejection of claim 12 under 35 U.S.C. § 103(a) as being unpatentable over Ballantyne in view of Ditzik and Foladare should be withdrawn.

Dependent claim 22, which is based upon independent claim 16, and incorporates all of its limitations, should also be allowable for the reasons presented above.

Allowable Subject Matter

Claim 17 was objected to as being dependent upon a rejected base claim, but was indicated to be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Although Applicants note with appreciation that claim 17 was indicated by the Examiner to be allowable if amended to include all of the limitations of the base claim 16, Applicants prefer at this time to assert that the base claim 16 is allowable over the prior art of record, while reserving the right at a later time to amend claim 17 as suggested by the Examiner.

Documents Cited But Not Relied Upon For This Office Action

Applicants need not respond to the assertion of pertinence stated for the references cited but not relied upon by the Office Action, because these references are not made part of the rejections in this Office Action. Applicants are expressly not admitting to this assertion and reserve the right to address the assertion should it form part of future rejections.

Conclusion

Applicants respectfully submit that claims 4-27 are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney Walter W. Nielsen at 602/298-8920 or the below signed attorney to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner of Patents, Washington, D.C. 20231, on this 29 day of January, 2003.

Name Jane Sagers

Jane Sagers
Signature



CLEAN VERSION OF AMENDED SPECIFICATION PARAGRAPHS

POINTING DEVICE WITH INTEGRATED AUDIO INPUT

Applicant: Jim A. Larson et al.

Serial No.: 09/211,942

The paragraph beginning on page 2, line 29.

Figure 5 illustrates another embodiment of a voice processing system;

The paragraph beginning on page 2, line 30.

Figure 6 illustrates another embodiment of a voice processing system;

After the paragraph beginning on page 2, line 30 insert the following two paragraphs:

Figure 7 illustrates a block diagram of an embodiment of a mobile computing device; and

Figure 8 illustrates a block diagram of an embodiment of a personal computer.

After the paragraph beginning on page 6, line 12, and before the paragraph beginning on page 6, line 26, insert the following nine paragraphs:

Figure 7 illustrates a block diagram of an embodiment of a mobile computing device such as a PDA 100. The PDA 100 in this example may comprise touch screen 102, keypad inputs 104, and a microphone 106. PDA 100 additionally includes a processor 140 to which touch screen 102, keypad 104, and microphone 106 are coupled.

Also coupled to processor 140 are a memory 142, an audio playback element 160, and a transmitter/receiver element (hereinafter "transceiver") 150. It will be understood by those of ordinary skill in the art that transceiver 150 may be implemented either as separate transmitter and receiver elements or as an integrated unit.

A suitable power source 180 may also be provided in PDA 100.

Memory 142 may store voice translation software 144.

Audio playback element 160 may be coupled to a loudspeaker 170 to play stored voice signals, when the PDA 100 is geographically away from PC 200 and the PDA 100 has not yet transmitted the voice signals to PC 200.

Transceiver 150 may be coupled to a stylus via a link 152, which may be either a wired or wireless link. Transceiver 150 may also be coupled via link 154 to a network that may include a FAX machine or PC (such as PC 200).

Figure 8 illustrates a block diagram of an embodiment of a PC 200. PC 200 in this example comprises a processor 210. Coupled to processor 210 may be a display 202, a keyboard 204, a memory 206, and a transceiver 212. It will be understood by those of ordinary skill in the art that transceiver 212 may be implemented either as separate transmitter and receiver elements or as an integrated unit.

Memory 206 may store voice translation software 208.

Transceiver 212 may be coupled to a stylus via link 214, which may be a wireless link. Transceiver 212 may also be coupled via link 216 to a mobile computing device (such as PDA 100).